

**National Renewable Energy Laboratory  
Request for Proposal Number RCQ-0-30619**

**“Photovoltaic Technologies Beyond the Horizon”**

**READ THIS DOCUMENT CAREFULLY**

**This solicitation is being conducted under the streamlined procedures for competitive subcontracts established by the National Renewable Energy Laboratory (NREL). NREL will award a subcontract based on:**

- **Best Value Combination of Qualitative Merit and Price**

Issue Date: **April 14, 2000**

Proposal Due Date: **June 15, 2000**

\*\*\*\*\*Technical questions must be received in writing no later than May 15, 2000.\*\*\*\*\*

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|-----------|--------------------------------|---|
| <b>1.</b> | <b>Solicitation Type</b>       | Streamlined Price   |
| <b>2.</b> | <b>Issuer</b>                  | National Renewable Energy Laboratory<br>Attn: Liz Surek, M/S 2713<br>1617 Cole Boulevard<br>Golden, CO 80401-3393   |
| <b>3.</b> | <b>Submit Offers to</b>        | National Renewable Energy Laboratory<br>Attn: Liz Surek, M/S 2713<br>1617 Cole Boulevard<br>Golden, CO 80401-3393   |
| <b>4.</b> | <b>For Information Contact</b> | Liz Surek, Subcontract Administrator<br>Phone: (303) 384-7354<br>Fax: (303) 384-7329<br>E-mail/Internet: <a href="mailto:elizabeth_surek@nrel.gov">elizabeth_surek@nrel.gov</a> |

## **5. Project Description**

This solicitation supports the mission of the U.S. Department of Energy DOE National Photovoltaics Program to make photovoltaics (PV) a significant part of the domestic economy. This mission is described more completely in the National Photovoltaics Program Five Year Research Plan. (<http://www.nrel.gov/ncpv/pdfs/25847.pdf>).

The objectives of this solicitation are to:

- a. Support scientific research leading to non-conventional, breakthrough PV technologies with higher efficiency and lower cost for converting sunlight to electricity.
- b. Identify new scientific ideas critical to the foundation of tomorrow's PV research enterprise.
- c. Explore non-conventional PV technologies that might "leapfrog" others toward the goal of making a significant contribution to our nation's energy supply and environment.

Areas of interest are described in Appendix A, Statement of Work (see Attachment No. One [1]).

## **6. Available Project Funding**

It is the intent of NREL to award 8-12 subcontracts under this solicitation. The number of awards may vary due to the proposals received and the availability of funds. NREL reserves the right to make any number of awards or to make no awards. The anticipated funding available for all awards is anticipated to be \$1,500,000 on an annual basis. There is no commitment by NREL to award a particular number of subcontracts or to award a particular dollar value for any subcontracts awarded.

The anticipated funding level per subcontract will range between \$100,000 and \$200,000 per 12-month period, with a maximum total for the subcontract not to exceed \$500,000 for an expected period of performance of three (3) years. All resultant subcontracts will be incrementally funded based on availability of fiscal-year funds.

## **7. Instructions for Offerors**

- a. Attachment Number One (1) is the sample subcontract including the Statement of Work (Appendix A), Standard Terms and Conditions (Appendix B-2), and Intellectual Property Provisions (Appendix C-1 for large business and Appendix C-2 for small business \*\*). Indicate in the cover letter to the proposal whether or not you accept the sample subcontract, including the appendices.
- b. You must submit the "Representations and Certifications" (Attachment Number Two [2]) with your proposal.

\*\*SIC Code and Small Business Size Standard\*\*

The Standard industrial classification (SIC) code for this acquisition is 8731.

1. The small business size standard is 500 employees or less.
  2. The small business size standard for a concern which submits an offer in its own name, other than on a construction or service subcontract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- c. You must submit the “Price Proposal Form” (Attachment Number Three [3]) with your proposal. Submit a proposed budget for each of the three years and a summary budget totaling the three years. (See “Price Proposal Preparation Instructions” included with Attachment Number Three). Be sure to **INCLUDE** supporting documentation.
  - d. Provide a technical proposal as indicated below.
  - e. Your price and delivery terms must be valid for 180 days from the date of your offer.
  - f. This solicitation does not allow the submittal of facsimile or electronic proposals.
  - g. The offeror must be a university, college or U.S. company.
  - h. No more than two (2) proposals may be submitted by any offeror.

## **8. Competitive Negotiated Procurement Using Qualitative Criteria**

This procurement shall be conducted utilizing Best Value Selection (BVS), which seeks to select an offer based on the best value combination of qualitative merit and price of the offers submitted.

BVS evaluation is based on the premise that, if all offers are of approximately equal qualitative merit, award will be made to the offeror with the lowest evaluated price. However, NREL will consider awarding to an offeror whose offer demonstrates higher qualitative merit if the difference in price is commensurate with the higher qualitative merit. Conversely, NREL will consider making award to an offeror whose offer demonstrates lower qualitative merit if the price differential between it and the other offers warrant doing so.

The Statement of Work included in this Request for Proposal serves as NREL’s baseline requirements. The following qualitative merit criteria establish what NREL considers to be valuable in an offer. These qualitative merit criteria are performance based and permit selection of the offer that provides better qualitative merit for a reasonable marginal increase in price. All offers will be judged against these qualitative merit criteria. Offerors should provide adequate information on all of these qualitative merit criteria (in addition to adequate price information) to permit proper evaluation.

## **9. Qualitative Merit Criteria for Best Value Selection**

The following qualitative merit criteria will be used by reviewers to judge the value of the proposal in meeting the objectives of the solicitation. The qualitative merit criteria and the value of each criteria, described below, are applicable to this solicitation:

### **Criteria 1: Technical Quality and Relevance of the Proposal**

- The extent to which the proposed research has the potential to contribute to DOE's and NREL's long-term PV goals of developing low-cost, high-performance, reliable, photovoltaics.
- The extent to which the proposal is innovative by proposing non-conventional or potential breakthrough approaches or by proposing fundamental research to overcoming the problems for converting sunlight to electricity.
- The extent to which the research approach has been developed and potential problems have been anticipated in the proposed research, as well as the explanation and soundness of the proposed research to overcome the potential problems.

### **Criteria 2: Capabilities of the Offeror**

- The availability, qualifications, and past performance of the proposed technical personnel, as well as the resources, experience, and flexibility of the proposing team, as well as a safe work environment.

### **Criteria 3: Program Policy Factors**

- Consideration will also be given to diversity of methods and types of work proposed to provide maximum opportunity to advance the overall long-term objectives of the National Photovoltaics Program.

The above criteria are listed in order of their relative importance. Qualitative merit criteria are more significant than price/cost. However, as qualitative merit criteria tend to equalize among offerors, price/cost may become a more significant factor in the selection decision.

NREL will evaluate offers in two general steps:

Step One -- An initial evaluation will be performed to determine if all required information has been provided and the offeror has made a reasonable attempt to present an acceptable offer. Offerors may be contacted only for clarification purposes during the initial evaluation. Offerors determined not to be acceptable shall be notified of their rejection and the reasons therefor and excluded from further consideration. For example, an offeror's proposal may be rejected because a major part of the requested documentation is missing.

Step Two -- All acceptable offers will be evaluated against the qualitative merit criteria listed above. Based on this evaluation, NREL has the option, depending on the specific circumstances of the offers received, to utilize one of the following methods: (1) make selection and award without discussions; (2) make selection after discussions with all

finalists, and then enter into negotiations only with the successful offeror(s); (3) conduct parallel negotiations with all acceptable offerors or finalists and then make selection; or (4) after discussions with all finalists, select two or more offerors for parallel negotiations and then make selection.

## **10. Technical Proposal Preparation**

Your proposal response will determine your capability to participate in this procurement. The proposal response should be specific and complete in every detail. The proposal should be practical and should be prepared simply and economically, providing straightforward, concise delineation of capabilities necessary to perform the proposed project that meet the areas of interest covered by this solicitation.

The proposal should contain the following items:

- a. Title page, giving proposal title, name of organization, and principal investigator (with postal address, telephone number, fax number, and e-mail address). The title should be succinct and capture the essence of the proposal.
- b. Brief Statement of the Problem and its history (maximum one (1) page).
- c. Statement of Technical Approach (maximum five (5) pages).
- d. Brief Statement of Anticipated Problems that the offeror recognizes and recommendations for how they may be overcome (maximum one (1) page).
- e. Statement of Expected Results and a Proposed Schedule for major project tasks (maximum one (1) page). The proposed schedule for the R&D will include milestones and deliverables. Milestones may relate to understanding developed as a result of the R&D on critical issues affecting the progress or redirection of the R&D. Technical reports shall constitute the principal deliverables but additional deliverables can be material samples or devices demonstrating the progress or status of the research effort.
- f. Capabilities (maximum one (1) page).
- g. References and Bibliography (maximum one (1) page). Relevant references may be cited, but do not include copies of referenced articles in the submission.
- h. Attachment Number One (1) -- State whether you accept the Sample Subcontract in principle and submit a copy of your current Indirect Rate Agreement, if applicable.
- i. Attachment Number Two (2) – Submit completed and signed Representations and Certifications.
- j. Attachment Number Three (3) – Submit a proposed budget for each of the three years and a summary budget totaling the three years. Use the form in Attachment Number Three (3) and INCLUDE supporting documentation for your proposed costs.

**The total document, including references, but not including Attachments 1, 2, and 3, is limited to ten (10) pages (not counting title page).**

**The proposal, in an ORIGINAL (unbound) and ten (10) stapled copies should be mailed or otherwise delivered to the address indicated on page one (1) of this RFP.**

**\*\*To facilitate handling, please mark on the outside envelope or package containing your proposal or other matters relating to this solicitation document:**

**RFP No. RCQ-0-30619**

**To be Opened by Addressee Only\*\***

## **11. Full Text Solicitation Provisions**

### **a. Late Submissions, Modifications, and Withdrawals of proposals**

Proposals, or modifications to them, received from qualified offerors after the latest date specified for receipt may be considered if received prior to award, and NREL determines that there is a potential cost, technical, or other advantage, as compared to previous proposals received. However, depending on the circumstances surrounding the late submission, NREL may consider a late proposal to be an indication of the offeror's performance capabilities, which could result in downgrading of their proposal by NREL evaluators in the technical evaluation process.

Proposals may be withdrawn by written notice or telegram (including mailgram) received at any time before award. Proposals may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal before award.

### **b. Restriction on Disclosure and Use of Data**

Offerors who include in their offers data that they do not want disclosed to the public for any purpose or used by the Government or NREL except for evaluation purposes, shall –(1.) Mark the title page with the following legend:

“This proposal or quotation includes data that shall not be disclosed outside the Government or NREL and shall not be duplicated, used, or disclosed--in whole or in part-- for any purpose other than to evaluate this proposal or quotation. If, however, a subcontract is awarded to this offeror as a result of--or in connection with--the submission of this data, the Government or NREL shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting subcontract. This restriction does not limit the Government's or NREL's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained on pages [*insert page and line numbers or other identification of pages*]”; and (2.) Mark each page of data it wishes to restrict with the following legend:

“Use or disclosure of data contained on this page is subject to the restriction on the title page of this offer.”

**c. Disclaimer**

NEITHER THE UNITED STATES, NOR THE DEPARTMENT OF ENERGY, NOR MIDWEST RESEARCH INSTITUTE, BATTELLE, BECHTEL, NATIONAL RENEWABLE ENERGY LABORATORY DIVISION, NOR ANY OF THEIR CONTRACTORS, SUBCONTRACTORS, OR THEIR EMPLOYEES MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, OR ASSUMES ANY LEGAL LIABILITY OR RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, OR USEFULNESS FOR ANY PURPOSE OF ANY OF THE TECHNICAL INFORMATION OR DATA ATTACHED AS ENCLOSURES OR OTHERWISE PROVIDED HEREIN AS REFERENCE MATERIAL.

**d. Protests**

Please note that the General Accounting Office and the Department of Energy no longer accept or rule on protests from Subcontractors. DEAR 970.7106 and 970.7107 which prescribes procedures for the handling of mistakes in bid situations in purchasing by M&O contractors and protests of M&O contractor procurements have been deleted from the DEAR. Should an offeror have any concerns regarding an NREL selection determination, the offeror may contact Marty Noland, Advocate for Commercial Practices at (303) 384-7550. If concerns are received from an offeror or a subcontractor, NREL will address each concern on an individual basis.

**e. Summary of Deviations/Exceptions to Subcontract and/or Terms and Conditions in Appendices**

The offeror will explain any exceptions (including deviations and conditional assumptions) taken with respect to this Request For Proposal. Any exceptions must contain sufficient amplification and justification to permit evaluation. Such exceptions will not, of themselves, automatically cause a proposal to be termed unacceptable. A large number of exceptions, or one or more significant exceptions not providing any obvious benefit to the Government may, however, result in rejection of such proposal(s) as unacceptable. Highlight exceptions in the margin of the proposal where they appear in the text.

**12. Attachments to Request for Proposal**

The following are attachments to this Request for Proposal:

- a. Attachment Number One (1) - Sample Subcontract including Appendix A, Statement of Work. Appendix B-2, Standard Terms and Conditions, and Appendix C-1 (for large business) or Appendix C-2 (for small business), Intellectual Property Provisions, will be provided upon request submitted to the designated subcontract administrator for this project.
- b. Attachment Number Two (2) – Representations and Certifications form.
- c. Attachment Number Three (3) – Price Proposal Form including instructions.